



Gusau Journal of Accounting and Finance (GUJAF)

Vol. 4 Issue 1, April, 2023 ISSN: 2756-665X

A Publication of
Department of Accounting and Finance,
Faculty of Management and Social Sciences,
Federal University Gusau, Zamfara State -Nigeria

Gusau Journal of Accounting and Finance, Vol. 4, Issue 1, April, 2023

© **Department of Accounting and Finance**

Vol. 4 Issue 1
April, 2023
ISSN: 2756-665X

A Publication of
Department of Accounting and Finance,
Faculty of Management and Social Sciences,
Federal University Gusau, Zamfara State -Nigeria

All Rights reserved

Except for academic purposes no part or whole of this publication is allowed to be reproduced, stored in a retrieval system or transmitted in any form or by any means be it mechanical, electrical, photocopying, recording or otherwise, without prior permission of the Copyright owner.

Published and Printed by:

Ahmadu Bello University Press Limited, Zaria

Kaduna State, Nigeria.

Tel: 08065949711, 069-879121

e-mail: abupress2013@gmail.com

abupress2020@yahoo.com

Website: www.abupress.com.ng

EDITORIAL BOARD

Editor-in-Chief:

Prof. Shehu Usman Hassan

Department of Accounting, Federal University of Kashere, Gombe State.

Associate Editor:

Dr. Muhammad Mustapha Bagudo

Department of Accounting, Ahmadu Bello University Zaria, Kaduna State.

Managing Editor:

Umar Farouk Abdulkarim

Department of Accounting and Finance, Federal University Gusau, Zamfara State.

Editorial Board

Prof. Ahmad Modu Kumshe

Department of Accounting, University of Maiduguri, Borno State.

Prof Ugochukwu C. Nzewi

Department of Accounting, Paul University Awka, Anambra State.

Prof Kabir Tahir Hamid

Department of Accounting, Bayero University, Kano, Kano State.

Prof. Ekoja B. Ekoja

Department of Accounting, University of Jos.

Prof. Clifford Ofurum

Department of Accounting, University of PortHarcourt, Rivers State.

Prof. Ahmad Bello Dogarawa

Department of Accounting, Ahmadu Bello University Zaria.

Prof. Yusuf. B. Rahman

Department of Accounting, Lagos State University, Lagos State.

Prof. Suleiman A. S. Aruwa

Department of Accounting, Nasarawa State University, Keffi, Nasarawa State.

Prof. Muhammad Junaidu Kurawa

Department of Accounting, Bayero University Kano, Kano State.

Prof. Muhammad Habibu Sabari

Department of Accounting, Ahmadu Bello University, Zaria.

Prof. Okpanachi Joshua

Department of Accounting and Management, Nigerian Defence Academy, Kaduna.

Prof. Hassan Ibrahim

Department of Accounting, IBB University, Lapai, Niger State.

Prof. Ifeoma Mary Okwo

Department of Accounting, Enugu State University of Science and Technology, Enugu State.

Prof. Aminu Isah

Department of Accounting, Bayero University, Kano, Kano State.

Prof. Ahmadu Bello

Department of Accounting, Ahmadu Bello University, Zaria.

Prof. Musa Yelwa Abubakar

Department of Accounting, Usmanu Danfodiyo University, Sokoto State.

Prof. Salisu Abubakar

Department of Accounting, Ahmadu Bello University Zaria, Kaduna State.

Dr. Isaq Alhaji Samaila

Department of Accounting, Bayero University, Kano State.

Dr. Fatima Alfa

Department of Accounting, University of Maiduguri, Borno State.

Dr. Sunusi Sa'ad Ahmad

Department of Accounting, Federal University Dutse, Jigawa State.

Dr. Nasiru A. Ka'oje

Department of Accounting, Usmanu Danfodiyo University Sokoto State.

Dr. Aminu Abdullahi

Department of Accounting, Usmanu Danfodiyo University Sokoto, State.

Dr. Onipe Adebenege Yahaya

Department of Accounting, Nigerian Defence Academy, Kaduna State.

Dr. Saidu Adamu

Department of Accounting, Federal University of Kashere, Gombe State.

Dr. Nasiru Yunusa

Department of Accounting, Ahmadu Bello University Zaria.

Dr. Aisha Nuhu Muhammad

Department of Accounting, Ahmadu Bello University Zaria.

Dr. Lawal Muhammad

Department of Accounting, Ahmadu Bello University Zaria.

Dr. Farouk Adeza

School of Business and Entrepreneurship, American University of Nigeria, Yola.

Dr. Bashir Umar Farouk

Department of Economics, Federal University Gusau, Zamfara State.

Dr Emmanuel Omokhuale

Department of Mathematics, Federal University Gusau, Zamfara. State

ADVISORY BOARD MEMBERS

Prof. Kabiru Isah Dandago, Bayero University Kano, Kano State.

Prof A M Bashir, Usmanu Danfodiyo University Sokoto, Sokoto State.

Prof. Muhammad Tanko, Kaduna State University, Kaduna.

Prof. Bayero A M Sabir, Usmanu Danfodiyo University Sokoto, Sokoto State.

Prof. Aliyu Sulaiman Kantudu, Bayero University Kano, Kano State.

Editorial Secretary

Usman Muhammad Adam

Department of Accounting and Finance, Federal University Gusau, Zamfara State.

CALL FOR PAPERS

The editorial board of Gusau Journal of Accounting and Finance (GUJAF) is hereby inviting authors to submit their unpublished manuscript for publication. The journal is published in two issues of April and October annually. GUJAF is a double-blind peer reviewed journal published by the Department of Accounting and Finance, Faculty of Management and Social Sciences, Federal University Gusau, Zamfara State Nigeria. The Journal accepts papers in all areas of Accounting and Finance for publication which include: Accounting Standards, Accounting Information System, Financial Reporting, Earnings Management, , Auditing and Investigation, Auditing and Standards, Public Sector Accounting and Auditing, Taxation and Revenue Administration, Corporate Governance Issues, Corporate Social Responsibility, Sustainability and Environmental Reporting Issue, Information and Communication Technology Issues, Bankruptcy Prediction, Corporate Finance, Personal Finance, Merger and Acquisitions, Capital Structure, Working Capital Management, Enterprises Risk Management, Entrepreneurship, International Business Accounting and Finance, Banking Crises, Bank's Profitability, Risk and Insurance Issue, Islamic Finance, Conventional and Islamic Banks and so forth.

GUIDELINES FOR SUBMISSION AND MANUSCRIPT FORMAT

The submission language is English and must be a well-researched original manuscript that has not previously been submitted elsewhere for publication. The paper should not exceed more than 15 pages on A4 type paper in MS-word format, 1.5-line spacing, 12 Font size in Times new roman. Manuscript should be tested for plagiarism before submission, as the maximum similarity index acceptable by GUJAF is 25 percent. Furthermore, the length of a complete article should not exceed 5000 words including an abstract of not more than 250 words with a minimum of four key words immediately after the abstract. All references including in text citation and reference list, tables and figures should be in line with APA 7th Edition publication manual. Finally, manuscript should be send to our email address elfarouk105@gmail.com and a copy to our website on journals.gujaf.com.ng

PUBLICATION PROCEDURE

After receiving a manuscript that is within the similarity index threshold, a confirmation email will be send together with a request to pay a review proceeding fee. At this point, the editorial board will take a decision on accepting, rejecting or making a resubmission of the manuscript based on the outcome of the double-blind peer review. Those authors whose manuscript were accepted for publication will be asked to pay a publication fee, after effecting all suggested corrections and changes made on the manuscript. All corrected papers returned within the specified time frame will be published in that issue.

PAYMENT DETAILS

Bank: FCMB

Account Number: 7278465011

Account Name: Gusau Journal of Accounting and Finance

FOR INQUIRY

The Head,

Department of Accounting and Finance,

Federal University Gusau, Zamfara State.

elfarouk105@gmail.com

+2348069393824

FOR MORE INFORMATION, CONTACT

The Editor-in-Chief on +2348067766435

The Associate Editor on +2348036057525

OR visit our website on www.gujaf.com.ng or journals.gujaf.com.ng

CONTENTS

Board Characteristics and Earnings Management of Listed Consumer Goods Firms in Nigeria <i>Benjamin Gwabin Joseph, Murtala Abdullahi PhD, Benjamin Kumai Gugong PhD</i>	1
Dividend Policy and Value of Listed Non-Financial Companies in Nigeria: The Moderating Effect of Investment Opportunity <i>Abubakar Umar</i>	18
Trialability and Observability of Accrual Basis International Public Sector Accounting Standards Implementation in Nigeria <i>Aliyu Abdullahi Ahmed PhD, Zakari Usman</i>	35
Liquidity Risk and Performance of Non-Financial Firms Listed on the Nigerian StockExchange <i>Muhammed Alhaji Abubakar, Nurnaddia Binti Nordin PhD, Abubakar Hamisu Umar</i>	54
Board Diversity, Political Connections and Firm Value: An Empirical Evidence from Financial Firms in Nigeria <i>Rofiat Oyetunji, Isah Shittu PhD, Ahmed Bello PhD.</i>	75
Moderating Effect of Bank Size on the Relationship between Interest Rate, Liquidity, And Profitability of Commercial Banks in Nigeria <i>Shehu Usman Hassan, Bello Sabo (Ph. D), Ismai'l Idris Tijjani (Ph. D), Idris Ahmed Aliyu. (Ph. D)</i>	96
Sources of Health Care Financing Among Surgical Patients Seen at the Dalhatu Araf Specialist Hospital Lafia Nasarawa State Nigeria <i>Ahmed Mohammed Yahaya, Babatunde Joseph Kolawole, Bello Surajudeen Oyeleke</i>	121
Transparency, Compliance and Sustainability of Contributory Pension Scheme in Nigeria <i>Olanrewaju Atanda Aliu (Ph. D), Mohamad Ali Abdul-Hamid (Ph. D), Salami Suleiman (Ph. D), Salam Mudathir Olanrewaju</i>	135

- Examining the Impact of Working Capital Management on the Financial Performance of Listed Industrial Goods Entities in Nigeria **151**
Sani Abdulrahman Bala (Ph. D), Jamilu Jibril, Taophic Olarewaju BAKARE
- Corporate Governance Factors and Tax Avoidance of Listed Deposit Money Banks in Nigeria **171**
Sani Abdulrahman Bala (Ph. D), Umar Salim Ibrahim, Samaila Dannana
- Risk Committee Demographic Traits: A Study of the Impact of Expertise on Risk Disclosure Quality of Listed Insurance Firms in Nigeria **192**
Wada Najib Abbas, Dandago, Kabiru Isa (Ph. D), Rabi, Naja'atu Bala
- Moderating Effect of Audit Committee on the Relationship Between Audit Quality and Earnings Management of Listed Non-Financial Services Firms in Nigeria **216**
Ahmad Muhammad Ahmad, Lubabah Mansur Kwanbo (Ph.D.), Shehu Usman Hassan (Ph.D.) Musa Suleiman Umar (Ph.D.)
- Determinants of Audit Opinion of Negative-Book-Value Firms in Nigeria: Firm Value and Audit Characteristics Perspective **237**
Asma'u Mahmood Baffa (Ph. D), Lawal Mohammed (Ph.D.), Ahmed Bello (Ph.D.) Umar Farouk Abdulkarim
- Intervention Announcements and Naira Management: Evidence from the Nigerian Foreign Exchange Market **254**
Adedeji Daniel Gbadebo
- Is There Earnings Discontinuity After the Implementation of IFRS in Nigeria? **275**
Adedeji Daniel Gbadebo

DIVIDEND POLICY AND VALUE OF LISTED NON-FINANCIAL COMPANIES IN NIGERIA: THE MODERATING EFFECT OF INVESTMENT OPPORTUNITY

Abubakar Umar

Department of Accounting
Yusuf Maitama Sule University, Kano

abubakar2235@gmail.com

+2348039247517

Abstract

The relationship between dividend policy (DP) and the value of firms (FV) has been investigated by several researchers in different jurisdictions. However, the findings of these researchers have been always inconsistent. This is due to the other factors that affect this relationship, which include the investment opportunity (IO). This paper is therefore aimed to empirically examine the impact of dividend policy on firms' value with investment opportunity as moderator. The population of the study consists of 102 listed Non-financial companies. Based on the criterion set by the researcher, a judgmental technique of sampling was used in selecting 30 non-financial companies from the year 2011 to 2020. Tobin's' Q (TQ) and Market Price Per share (MPS) are the proxies for firms' value, while Dividend per share (DPS) dividend payout ratio (DPR) and dividend yield (DY) are the proxies for dividend policy. Investment opportunity (IO) was measured as fixed asset growth. The study also used Firms' size (FSIZE), Leverage (LEV) and Industry dummy (IND) as control variables. Descriptive statistics, correlation, and Feasible Generalized Least Squares (FGLS) analysis were used. It was found that DP, DPR, and DY are statistically significant to influence TQ. While MPS was only influenced by DP and DY. It was also found that IO did not moderate the relationship between dividend policy and firm value. It is recommended that the management of corporations should put measures in place that will increase revenue and decrease expenses so that regular dividend payments could be maintained.

Key words: Dividend per share, dividend payout ratio, dividend yield, Tobins' Q, Market price per share, investment opportunity.

<https://doi.org/10.57233/gujaf.v4i1.198>

1. Introduction

According to Putu et al. (2014), how investors perceive a company is linked to its value, which is directly tied to stock prices. The company's principal goal is to maximize its value, which also affects the level of shareholder prosperity. The share price may be seen as the market value of the firm that can benefit the shareholder; as a result, an increase in a company's share price raises the welfare of its shareholders. It's essential to enhance corporate value as it also means increasing shareholder wealth, which is the primary objective of the company (Ibrahim, 2020).

A firm's value (FV) can be influenced by several factors, including the dividend policy (DP) (Setiyawati et al., 2017). The focus of the DP is to determine the portion

of earnings that should be disbursed as dividends to investors and the portion that should be kept for reinvestment. The development of the DP is heavily influenced by the available investment opportunities and dividend value of the company. Therefore, it's critical financial decisions that will have a significant impact on a company's profitability. It is a plan that guides management on how to distribute the company's returns to stockholders through various forms of dividends over a set period (Kehinde & Abiola, 2001). However, previous literature states that companies delay distribution of dividends due to investment opportunities (IO) (Abo and Bokpin, 2010; Subramaniam et al., 2011; Subramaniam and Shaiban, 2011). According to Jones and Sharma (2001), a firm's investments or options to grow constitute the investment opportunity set (IOS) of that firm. Myers (1977) explains an IO as any potentially profitable investment with the prospect of providing an economic return that has yet to be realized by the firm. Therefore, an IO is the part of the value of a firm that results from the option to make a future investment (Smith & Watts, 1992). The DP of a company will be influenced, to a large extent, by the IO available to that company because they will determine the amount of funds that will be available for distribution as a dividend (Brigham & Houston, 2016). The amount of dividend to be paid by a company would be determined by the number of potentially profitable investments that are available to the company. Companies will pay a small portion of their earnings as dividends when they have many potential profitable investments (Myers & Majluf, 1984). As asserted by Jensen (1986), companies will rather use their internal resources to take advantage of available IO than use external resources, which are more expensive. This would no doubt reduce the fund that would otherwise be paid out as dividend.

Previous studies conducted on DP usually focus on the direct impact of DP on FV. Mixed results were obtained by different researchers. Some studies found a significant influence between DP and FV (Amollo, 2016; Budagaga, 2017; Anton, 2017; Safitri et al., 2020). Other researchers (like Emeni and Ogbulu, 2015; Rehman, 2016; Husain and Sunardi, 2020) found insignificant effects. The inconsistency in the results shows that there is a need for moderation to see if the direction of the result could be changed. Hence, the present study will use IO as a moderating variable to moderate the relationship between DP and FV as used by Yustisiana (2017).

The Non-financial sector is critical to the economy of any country. It accounted for more than 63% of Nigerian listed companies (NSE, 2020). It comprises manufacturing and services sectors. However, a close examination by the researcher of the information published either by the companies in their annual

reports or by the Nigerian Stock Exchange (Nigerian Exchange Group) about the dividend payment reveals that between the years 2011 to 2020, only about 56% of listed non-financial companies in Nigeria paid a dividend at least once. In fact, this study will use data from only 30 companies as the only companies who paid dividend in the seven out of the ten years covered by this study. This reveals that, as noted by Ajayi and Mougouè (2017), some prefer companies that constantly pay dividend to shareholders, while others believe that companies should retain profits and use it to tap into the available investment opportunities.

The remaining part of the paper will cover the literature review and the hypothesis development, the methodology, result and discussion, and the conclusion and recommendation.

2. Literature Review and Hypothesis Development

Miller and Modigliani's (1961) dividend irrelevance theory offers insight into the relationship between DP and FV. The theory suggests that a company's stock price and cost of capital aren't influenced by its DP. According to Pilotte (1992), companies that pay out most of their earnings as dividends experience less capital appreciation. Dividend payout and capital appreciation have an inverse correlation. According to this theory, irrespective of its size, the sum of the dividends is always equal to the capital appreciation. Hence, investors are always indifferent. If the dividend paid by the company falls short of investors' expectations, investors can dispose-off part of their shareholding to obtain cash, and vice versa (Farrukh et al., 2017).

Evidence from empirical studies on DP and FV yielded mixed results. For instance, Egbeonu et al. (2016) proved that dividend per share is negatively related to FV. Aroh et al. (2021) discovered that DP had a negative influence on company value using data from 81 Nigerian companies. In contrast, Anton (2016) discovered that the dividend payout ratio has positive effects on company value based on a sample of 63 Romanian non-financial companies. Similarly, Budagaga (2017) established a positive and significant association between dividend payment and company value utilizing a residual income technique based on 44 chosen companies. Likewise, Okeke et al. (2021) found that dividends per share and earnings per share positively affect the share price of Nigerian companies. Also from Nigeria, Lawrence et al. (2021) proved that DP determined the value of non-financial firms.

However, Emeni and Ogbulu (2015), using a sample of 10 firms, proved that firm DP does not affect FV. Similarly, Husain and Sunardi (2020) used a sample of 11 companies from the automobile and components sub-sector to study the influence

of DP on FV in Indonesia and found no significant effect. Also, Hansda et al. (2020), using the GMM model, found that DP does not affect the value of 500 firms listed on the BSE. Likewise, Bon and Hartoko (2022) using data from 30 Indonesian companies, found an insignificant relationship between DP and value.

From the above literature review, we can see conflicting findings from different authors. While some studies found a significant relationship between DP and FV, others found an insignificant relationship. Therefore, based on this literature, we proposed the following hypothesis:

H1 Dividend policy has an impact on firms' value.

Dividend policy, Investment opportunity and firm's value

The relationship between DP, IO, and FV can be explained with the help of the dividend remaining theory. According to this theory, the focal point of any organization should not be the number of dividends to be shared with shareholders. A dividend should only be paid when all the available potential investments with prospective economic benefits are exhausted. Therefore, the amount of dividend to be paid would be determined by the amount and number of capital projects that the organization planned to embark on. The reason for calling this theory "the residual theory of dividends" is that dividends will only be paid with residual profits after investments (Livoreka et al., 2014). Titman (2011) states that there is a negative association between IO and dividend payout ratio. A rise in IO will result in a fall in the dividend payout ratio.

Previous literature proves the existence of a relationship between DP and IO. For instance, Smith and Watts (1992) contend that a low dividend distribution strategy is likely to be chosen by companies with a large IOS since dividends and investments are competing in the uses of a company's cash resources. Similarly, Abbott (2001) asserts that a company's dividend payout is inversely affected by an increase in IOS. In other words, companies that experienced an increase in IO usually reduced their dividend payout, and vice versa. Abor and Bokpin (2010) found a negative and significant relationship between IO and dividend payout ratio. Likewise, Subramaniam et al. (2011) also found a negative and significant relationship using a sample of 409 companies in Malaysia.

In contrast, Siboni et al. (2015) proved that there is a positive association between IO and DP using a sample of 88 Iranian companies. Similarly, Andaswari et al. (2017) using structural equation modeling on 14 companies from the Indonesian construction sector, found that IOS positively affects DP.

The inconsistency in the findings opens a possibility that IO is not a direct determinant of dividend decisions but rather a moderating variable of the direct relationship between profitability, company growth, and dividend decision (Sarmiento et al., 2014). It is on this note that Yustisiana (2017) investigates the influence of DP on shareholder wealth by incorporating IO as a moderating variable. It is proved that IO moderates the relationship between DP and shareholders' wealth. Similarly, Raharja et al. (2020) found that IO moderates the relationship between dividend decisions and a firm's profitability. We, therefore, developed the following hypothesis:

H2: Investment opportunity moderates the impact of dividend policy and firms' value.

3. Methodology

This paper examines the effect of Dividend Policy and Firms' Value of Listed Non-Financial Companies in Nigeria, with Investment Opportunity as Moderating Variable. Data for the study was gathered from the annual reports of the firms covering the years 2011 through 2020. The researcher used a judgmental sampling technique in selecting the sample size based on the following criterion: (1) the company must have been listed on the floor of the Nigerian Stock Exchange not later than January 1, 2011; and (2) the company must have paid a dividend for at least seven (7) years out of the Ten (10) years covered by this study. Therefore, this paper removed companies that paid dividends for less than 7 years and companies with other missing data. The final sample comprises 30 companies over a period of 10 years. This makes it a 300-firm-year observation. See Table I for the sampling procedure.

Definition of variables and measurement

Firm value

This study use Tobin's Q and Market share price to measure firm value, consistent with previous studies (Safitri et al., 2020; Akhmadi and Januarsi, 2021). Tobin's Q is calculated by summing up the market capitalization and book value of debt and then dividing it by the total assets. The Market share price is the closing share price

Independent Variables

Consistent with the study of Oniyama et al. (2021), this paper used three measures of DP. Dividend per share is calculated in this study as the divided total dividend paid to the ordinary shareholders divided by the total number of shares in issues, dividend payout ratio-measured as dividend per share minus earning per share

dividend by dividend per share, and dividend yield- measured as dividend per share dividend by earning per share.

Moderating Variable

Investment opportunity is the moderating variable, which is measured as the ratio of increase in fixed assets over the total assets of period one, consistent with the study of Nasir et al. (2020).

Control variables

Three control variables namely firm size, leverage, and industry dummy was used in this study. Firm size is computed as the natural logarithm of the total assets (Hansda et al., 2020). Leverage is computed as the ratio of total interest-bearing liabilities to total assets (Hansda et al., 2020). As for the industry dummy, a value of 1 is assigned to manufacturing companies and 2 is assigned to service companies. See Table II for the summary of the variables used.

Regression model

The followings models were constructed:

$$TQ_{it} = \beta_0 + \beta_1DPS_{it} + \beta_2DPR_{it} + \beta_3DY_{it} + \beta_4LEV_{it} + \beta_5FSIZE_{it} + \beta_6IND_{it} + \epsilon_{it} \dots \dots \dots (1)$$

$$MPS_{it} = \beta_0 + \beta_1DPS_{it} + \beta_2DPR_{it} + \beta_3DY_{it} + \beta_4LEV_{it} + \beta_5FSIZE_{it} + \beta_6IND_{it} + \epsilon_{it} \dots \dots \dots (2)$$

$$TQ_{it} = \beta_0 + \beta_1DPS_{it} + \beta_2DPR_{it} + \beta_3DY_{it} + \beta_4IO_{it} + \beta_5IO*DPS_{it} + \beta_6IO*DYR_{it} + \beta_7IO*DY_{it} + \beta_8LEV_{it} + \beta_9FSIZE_{it} + \beta_{10}IND \epsilon_{it} \dots \dots \dots (3)$$

$$MPS_{it} = \beta_0 + \beta_1DPS_{it} + \beta_2DPR_{it} + \beta_3DY_{it} + \beta_4IO_{it} + \beta_5IO*DPS_{it} + \beta_6IO*DYR_{it} + \beta_7IO*DY_{it} + \beta_8LEV_{it} + \beta_9FSIZE_{it} + \beta_{10}IND \epsilon_{it} \dots \dots \dots (4)$$

Where:

B₀ = Constant

β₁ to β₁₀ = Coefficient of the parameters

ε = error term

i= firm

t= time

Table I Sample Procedure

Initial sample size before elimination	158
Companies listed after 2011	(10)
Financial services	(48)
Companies with payment of dividend less than 7 times	(58)
Companies with other missing data	(12)
Final sample size	30
Observation period (2011 – 2020)	10yrs
Number of observation	300

Source: Author’s Compilation (2023)

Table II Variables definitions and measurements

Variable Name	Measurement	Source(s)
Tobin's Q (TQ)	(Market capitalization plus total debt)/ =total assets	Siboni and Pourali (2015)
Market Share Price (MPS)	Closing share price	Oniyama et al. (2021)
Dividend per share (DPS)	Ordinary share dividend/Total number of shares in issue	Oniyama et al. (2021)
Dividend Pay-out ratio (DPR)	(Dividend per share – earning per share)/dividend per share	Bon and Hartoko (2022)
Dividend yield (DY)	DPS/MPS	Oniyama et al. (2021)
Investment Opportunity (IO)	(Fixed assets _{t2} – fixed assests _{t1})/Total assets _{t1}	Nasir et al. (2020)
Leverage (LEV)	Total interest-bearing debt/total assets	Hansda et al. (2020)
Firm Size (FSIZE)	Natural logarithm of total assets	Hansda et al. (2020)
Industry Dummy (IND)	Dummy variable 1= manufacturing companies, 2= service companies	Alkurdi and Mardini (2020)

Source: Author's Compilation (2023)

4. Results and Discussions

Descriptive statistics and Correlation analysis

Table III Descriptive Statistics

Variable	Obs	Mean	SD	Minimum	Maximum
TQ	300	1.372	1.255	0.330	4.990
MPS	300	50.258	66.911	2.110	232.98
DPS	300	2.1185	3.0537	0.080	11.00
DPR	300	0.586	0.381	0.000	1.473
DY	300	0.051	0.032	0.007	0.117
IO	300	0.018	0.041	-0.042	0.127
LEV	300	0.108	0.119	0.00	0.351
FSIZE	300	24.21	1.704	20.657	28.381
IND	300	1.100	0.301	1.000	2.000

Source: STATA Output (2023)

Table IV Pearson Correlation

Variables	TQ	MPS	DPS	DPR	DY	IO	FSIZE	LEV	IND	VIF
TQ	1.000									
MPS	0.5620	1.000								
DPS	0.4480	0.9220	1.000							1.42
DPR	0.2360	0.1178	0.2276	1.000						1.26
DY	-0.2983	-0.2484	-0.0063	0.3816	1.000					1.31
IOS	-0.0491	-0.0639	-0.0781	-0.0427	-0.0011	1.00				1.03
FSIZE	0.1907	0.5657	0.5008	0.0568	-0.2046	-0.1050	1.00			1.56
LEV	0.0641	0.1708	0.1491	-0.0538	-0.1013	0.1011	0.2225	1.00		1.08
IND	-0.1962	-0.2316	-0.2004	0.0982	0.3024	0.0159	-0.3660	-0.149	1.00	1.24

Source: STATA Output (2023)

The table III contains the summary statistics of the variables. The average value of TQ is 1.371967. This shows that non-financial enterprises in Nigeria have an average FV of 1.37 times their total assets. It also has a standard deviation of 1.255198; the lowest and highest values are 0.33 and 4.99 respectively. Score for MPS range from 2.11 to 232.98 respectively. Aside from that, it has a mean of 50.25797 and a standard deviation of 66.91101. This suggest that there is a significant difference in share prices between the firms.

With regards to independent variables, DPS ranged from 0.08 to 11, with 0.08 being the lowest score and 11 being the highest value. DPS has a mean value of 2.118467 and a standard deviation of 3.053724. The minimal values for DPR and DY are 0 and 0.006865, respectively. DPR had an average value of 0.5857307 and a standard deviation of 1.472727. DY has a 0.050669 mean, a 0.1166667 maximum, and a 0.0317097 standard deviation.

Finally, the control variables, the LEV value stood at 0.1081419. This indicates that, on average, 11% of the capital of the sampled companies is debt capital. LEV has a maximum value of 0.3511082 and a standard deviation of 0.118713. FSIZE has a mean value of 24.21 and a standard deviation of 1.704. This shows a wide gap in size between the companies.

Table IV contained the pearson correlation analysis of the variables. The correlation matrix suggests that there is a positive correlation between TQ, MPS, DPS and DPR. DY has a negative correlation with TQ, MPS, DPS, and DPR, while a negative correlation exists between DY and IO. Other variables, namely, IO, LEV, and FSIZE, have a positive correlation with TQ, MPS, and DPS. All the correlation values are below 0.8, which indicates the absence of multicollinearity, with the exception of DPS. However, the variance inflation factor (VIF) was run and the result indicated the absence of multicollinearity.

Regression results

The data of the study is a combined both time series and cross-sectional. Therefore, the fixed effect model and random effect model were conducted. The Hausman specification test was also run, and the result indicates that the fixed effect model is appropriate. Furthermore, the Modified Wald test for group-wise heteroscedasticity results shows that there is a problem with heteroscedasticity as the probability values are less than 5%. For this reason, the Pesaran test was conducted to check the presence of cross-sectional dependency, and the result indicates the absence of cross-sectional dependency as the probability values are more than 5%. Finally, the Wooldridge test was run and the probability values were less than 5%, which indicates the presence of autocorrelation. For this reason, the Feasible Generalized Least Squares (FGLS) model was adopted to test the hypothesis. According to (Greene, 2018), FGLS would be preferable when there is a problem of serial-autocorrelation cross-sectional dependency in panel data.

The Chi2 value in the first model is given as 185.37 with a probability value of 0.0000 indicating that the model is well-fitted. DPS and DPR have a positive coefficient with TQ. The coefficient and probability values of DPS are given as ($\beta=0.181, P=0.000$). This shows a positive correlation between the independent and dependent variables and that DPS has a positive effect on TQ. This also indicates that the value of the company increases as it pays a dividend. DPR also has a positive coefficient value with TQ ($\beta=1.036, P=0.000$). Additionally, this suggests that DPR has a significantly positive effect on TQ. This result is in accord with that of Siboni and Pourali (2015) and conflicts with that of Safitri et al. (2020). DY is negatively associated with TQ as it has a negative coefficient value ($\beta=-16.934, P=0.000$).

Accordingly, a rise in DY will cause a fall in TQ, and vice versa.

As for the control variables, LEV is positively associated with TQ but this relationship is insignificant as the probability value is more than 5%. The FSIZE has a negative significant association with TQ ($\beta=-0.118, P=0.005$). As the FSIZE increase by 1%, TQ will fall by 11.8%.

In the second model, the coefficient value of DPS is given as $\beta=19.392$ with a corresponding probability value of $P=0.000$, which is less than 5%. This means DP is positively significant in influencing MPS. This is consistent with the studies of (Sarwar 2013; Okeke et al., 2021). DPR has a negative coefficient value of $\beta=-0.527$ with a corresponding probability value of $P=0.873$, which is more than 5%. This indicates a negative relationship between DPR and MPS. As MPS increases,

DPR decreases and vice versa. However, the probability value is more than 5%, which is insignificant. This finding contradicts the findings of Nugraha (2019). DY also has a negative coefficient value of $\beta=-503.061$, with a corresponding probability value of $P=0.000$ which is significant at all levels. This indicates a negative relationship between DY and MPS. DY is statistically significant to influence MPS. These findings contradict the findings of Farruk et al. (2017).

LEV has a negative, insignificant association with MPS. FSIZE has a positive and significant association with MPS. It has a beta coefficient of $\beta= 3.640$ a probability value of $P = 0.000$, which is significant at 1%, 5%, and 10%.

Table 3 Regression result (FGLS)

	TOBIN'S Q		MPS	
	Coeff.	P-value	Coeff.	P-value
Constant	4.403	0.000	-66.066	0.002
DPS	0.181	0.000	19.392	0.000
DPR	1.036	0.000	-0.527	0.873
DY	-16.934	0.000	-503.061	0.000
LEV	-0.028	0.954	0.915	0.925
FSIZE	-0.118	0.005	3.640	0.000
IND	-0.285	0.177	11.651	0.005
Summary				
Wald Chi ²	185.37	0.000	3249.24	0.0000
Hausman	39.38	0.000	15.94	0.0070
Modified Wald				
test	2568.86	0.000	3.8e+05	0.0000
Wooldridge test	59.155	0.000	45.001	0.0000

Source: STATA Output (2023)

Testing Moderating Effect of Investment Opportunity

These models are designed to determine if IO modifies the association between dividend policy and company value as determined by TQ and MPS. The fixed effect as well as the random effect models of estimation were conducted since the data is a combined both time series and cross-sectional. The results of the Hausman specification tests showed that the TQ model's fixed effect is the most suitable, but the MPS model's random effect is the most appropriate.

Furthermore, the Modified Wald test was also conducted and the result indicates that both models have characterized by the problem of heteroscedasticity. Therefore, both fixed effect and random effect models would be biased

(Moundigbaye et al., 2018). Consequently, this study employed a Feasible Generalized Least Squares (FGLS) model to correct this abnormality.

In the TQ model, the DPS positively influences the TQ ($\beta = 0.1832, P = 0.000$) which means that as the TQ increases, companies increase their dividend per share. DPR also positively impacts TQ ($\beta = 1.0395, P = 0.000$) meaning an increase in TQ will lead to an increase in DPR. This is in line with the findings of Siboni and Pourali (2015) and contradicts the findings of Safitri et al. (2020). Finally, DY negatively influences TQ ($\beta = -17.0431, P = 0.000$), meaning an increase in TQ will result in a decrease in DY.

IO is negatively associated with TQ ($\beta = -0.4579, P = 0.876$). However, the relationship is not significant as the probability value is greater than 0.005. This means IO is not significantly associated with TQ. On the interaction variables, which is product of IO and independent variables, DPS_IO, DPR_IO and DY_IO have ($\beta = -0.2079, P = 0.785$), ($\beta = -0.4530, P = 0.929$) and ($\beta = 6.5672, P = 0.895$) respectively. However, their probability values are more than 0.005. This indicates that IO did not moderate the relationship between DP and TQ. Among the three control variables, namely LEV, FSIZE, and IND, only FSIZE is statistically significant.

With regards to the fourth model, DPS and DY significantly influence the MPS. While DPS influenced it in a positive way ($\beta = 19.4749, P = 0.000$), DY, on the other hand, negatively affects MPS ($\beta = -505.8155, P = 0.000$). The DPR is not significant as the probability value is more than 0.005. Also, IO is not statistically significant to influence the MPR ($\beta = 4.4810, P = 0.938$) as its probability value is more than 0.005. Also, none of the interaction variables ($\beta = -5.0203, P = 0.738$), ($\beta = 31.9062, P = 0.749$), and ($\beta = 157.1166, P = 0.872$ for DP_IO, DPR_IO and DY_IO) is statistically significant to moderate the relationship between dividend policy and MPS. Therefore, IO did not moderate the relationship between DP and FV.

With regards to the control variables, FSIZE and IND are positively and statistically correlated to MPS as they have coefficient and probability values ($\beta = 3.6742, P = 0.000$) and ($\beta = 11.3735, P = 0.007$) respectively. On the other hand, LEV is not statistically significant ($\beta = 0.1849, P = 0.985$).

Table VI Moderation result (FGLS)

	TOBIN'S Q		MPS	
	Coeff.	P-value	Coeff.	P-value
Constant	4.4508	0.000	-66.668	0.002
DPS	0.1832	0.000	19.4749	0.000
DPR	1.0395	0.000	-1.0080	0.779
DY	-17.0431	0.000	-505.8155	0.000
IO	-0.4579	0.876	4.4810	0.938
DPS_IO	-0.2079	0.785	-5.0203	0.738
DPR_IO	-0.4530	0.929	31.9062	0.749
DY_IO	6.5672	0.895	157.1166	0.872
LEV	-0.0055	0.991	0.1849	0.985
FSIZE	-0.1191	0.004	3.6742	0.000
IND	-0.2865	0.180	11.3735	0.007
Summary				
Wald Chi ²				
Hausman	40.42	0.0000	10.47	0.3136
Modified Wald test	2513.09	0.0000	80271.43	0.0000
Wooldridge test	56.509	0.0000	52.935	0.0000

Source: STATA Output (2023)

5. Conclusion and Recommendation

In this study, the focus was to examine the effect of DP on the value of listed Non-financial companies in Nigeria, with IO as the moderating variable. Tobin's Q and market price per share was used measure of value; dividend per share, dividend payout ratio, and dividend yield served as proxies of DP. The study established that DPS and DPR positively influence TQ and DY yield negatively influences TQ. Also, DR positively influences MPR and DY negatively influences MPS. These findings are in conformity with several prior research conducted in Nigeria and other countries including developing and developed nations. The author concludes that DP influenced the value of listed Non-financial companies in Nigeria. Finally, the study proved that IO do not moderate the relationship between DP and FV. In all four models, the empirical results show a positive association between DPS and both TQ and MP. It is therefore recommended that the company's management be advised to create policies and strategies that increase revenue and decrease expenses to maintain regular dividend payments, which will ultimately increase the value of their firm.

References

- Abbott, L. (2001). Financing, dividend and compensation policies subsequent to a shift in the investment opportunity set. *Managerial Finance*, 27(3), 31-47.
- Abor, J., & Bokpin, G. A. (2010). Investment opportunities, corporate finance, and dividend payout policy. *Studies in Economics and Finance*, 27(3), 180-194.
- Akhmadi, A., & Januarsi, Y. (2021). Profitability and Firm Value: Does Dividend Policy Matter for Indonesian Sustainable and Responsible Investment (SRI)-KEHATI Listed Firms? *Economies*, 9(163), 1-23.
- Alkurdi, A., & Mardini, G. H. (2020). The impact of ownership structure and the board of directors composition on tax avoidance strategies: empirical evidence from Jordan. *Journal of Financial Reporting and Accounting*, 18(4), 795-812.
- Amollo, K. O. (2016). Effects of Dividend Policy on Firm Value for Commercial Banks in Kenya. *Research Project Submitted in Partial Fulfillment of the Requirements for the Award of the Degree Nor Master of Business Administration, School of Business, University of Nairobi.*
- Andaswari, S., Pitono, H., & Iskandar, R. (2017). Analysis of Investment Opportunity Set to Construction Companies Registered in IDX. *Mulawarman International Conference on Economics and Business (MICEB 2017)* (pp. 81-88). Balikpapan: Atlantis Press.
- Anton, S. G. (2017). Impact of dividends policy on firm value: A panel data analysis of Romanian listed firms. *Journal of Public Administration, Finance and Law*, 2016(10), 107-112.
- Aroh, N. N., Egolum, P. U., & Chukwuani, V. N. (2021). Dividend Policy Determinants of Firm Value: Empirical Evidence from Listed Non-Financial Companies in Nigeria. *International Journal of Research and Innovation in Social Science*, 5(7), 612-634.
- Bhabra, G. S. (2007). Insider ownership and firm value in New Zealand. *Journal of Multinational Financial Management*, 17(2), 142-154.
- Bon, S. F., & Hartoko, S. (2022). The Effect of Dividend Policy, Investment Decision, Leverage, Profitability and Firm Size on Firm Value. *European Journal of Business and Management Research*, 7(3), 7-13.
- Brigham, E. F., & Houston, J. F. (2016). *Fundamentals of Financial Management (14th edi.)*. Boston: Cengage Learning.
- Budagaga, A. (2017). Dividend payout and its impact on the value of firms listed on Istanbul stock exchange: A residual income approach. *International Journal of Economics and Financial Issues*, 7(2), 370-376.

- Davies, J. R., Hillier, D., & Mac Colgan, P. (2005). Ownership structure, managerial behavior, and corporate value. *Journal of Corporate Finance*, 11(4), 645-660.
- Dewiningrat, A. I., & Baskara, G. K. (2020). Does Dividend Policy Moderate The Relationship between Profitability, IOS, and Liquidity toward Firm Value? *American Journal of Humanities and Social Sciences Research*, 4(1), 49-52.
- Ejem, C. A., & Ogbonna, U. G. (2019). Modelling Dividend Policy and Firms' Value Relations in Nigeria. *International Journal of Economics and Financial Issues*, 9(6), 171-176. <http://orcid.org/0000-0003-4970-6947>.
- Emeni, F. K., & Ogbulu, O. M. (2015). The Effect of Dividend Policy on the Market Value of Firms in the Financial Service Sector in Nigeria. *Archives of Business Research*, 3(4), 15-29.
- Farrukh, K., Irshad, S., Khawani, M. S., Ishaque, S., & Ansari, N. Y. (2017). Impact of dividend policy on shareholders wealth and firm performance in Pakistan. *Cogent Business and Management*, 4(1), 1-11. <https://doi.org/10.1080/23311975.2017.1408208>.
- Green, W. (2018). *Econometric Analysis (8th ed.)*. London: Pearson Education Limited.
- Hansda, S., Sinha, A., & Bandopadhyay, K. (2020). Impact of Dividend Policy on Firm Value with Special Reference to Financial Crisis. *SIT Journal of Management*, 10(2), 158-175.
- Husain, T., & Sunardi, N. (2020). Firm's Value Prediction Based on Profitability Ratios and Dividend Policy. *Finance & Economics Review*, 2(2), 13-26.
- Ibrahim, U. A. (2020). Effect of financial leverage on firm value: evidence from selected firms quoted on the Nigerian stock exchange. *European Journal of Business and Management*, 12(3), 124-135.
- Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, 76(2), 323-329.
- Jones, S., & Sharma, R. (2001). The Association Between the Investment Opportunity Set and Corporate Financing and Dividend Decisions: Some Australian Evidence. *Managerial Finance*, 27(3), 48-64.
- Kallapur, S., & Trombley, M. A. (1999). The Association Between Investment Opportunity Set Proxies and Realized Growth. *Journal of Business Finance and Accounting*, 26(3), 505-519.
- Kehinde, J. S., & Abiola, J. O. (2001). *Foundation of Financial Management*. Lagos-Nigeria: Life Spring House publisher Agege.

- Lawrence, E., Kingsley, O., & Priscilla, I. (2021). Dividend Policy Determinants of Firm Value in Nigeria. *Academic Journal of Digital Economics and Stability*, 9, 9-22.
- Livoreka, B., Hetemi, A., Shala, A., Hoti, A., & Allanaj, R. (2014). Theories on Dividend Policy Empirical Research in Joint Stock Companies in Kosovo. *International Conference on Applied Economics (ICOAE)* (pp. 387-396). Kosovo: Elsevier B.V.
- Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth and Valuation of Shares. *Journal of Business*, 34(4), 411-433.
- Moundigbaye, M., Rea, W. S., & Reed, W. R. (2018). Which panel data estimator should I use?: A corrigendum and extension. *De Gruyter Open Access*, <http://dx.doi.org/10.5018/economics-ejournal.ja.2018-4>.
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147-175.
- Myers, S., & Majluf, N. (1984). Corporate Financing and Investment Decisions when Firms have Information those Investors do not have. *Journal of Financial Economics*, 13(2), 187-221.
- Nasiri, M. M., Mas'ud, M., Junaid, A., & Nur, A. N. (2020). Impact of Ownership Structure, Capital Structure, Investment Opportunities on Dividend and Value Policy Company. *IOSR Journal of Business and Management*, 22(11), 08-31.
- Nugraha, J. (2019). Investment Opportunity Set, Dividend Policy and Corporate Value: Evidence from Trade, Services and Investment Sector of Indonesian Stock Exchange. *Jurnal Nusamba*, 3(1), 151-164.
- Okataria, M., & Alexanddro, R. (2020). Analysis of the Influence of Capital Structure, Investment Opportunity Set and Profitabilty to Value Companies in Manufacturing Companies Before and During Pendamic COVID-19. *Advances in Economics, Business and Management Research, Volume 158 Proceedings of the 5th International Conference on Tourism, Economics, Accounting, Management and Social Science (TEAMS 2020)* (pp. 348-352). Bali: Atlanti Press.
- Okeke, V. C., Anike, C. A., & Onuora, D. V. (2021). Dividend Policy and Shareholders Wealth in Nigeria (2014-2019). *Internationa lJournal of Innovative Finance and Economics Research*, 9(1), 81-91.
- Oniyama, M. E., Olaoye, S. A., & Ogundajo, G. O. (2021). Dividend Policy and Market Performance of Listed Manufacturing Companies in Nigeria. *Journal of Accounting and Finance*, 21(2), 82-95.

- Pilotte, E. (1992). Growth opportunities and the stock price response to new financing. *Journal of Business*, 65(3), 371-394.
- Premeswari, S. Y., & Suprihadi, H. (2017). Pengaruh kinerja keuangan dan investment opportunity set (IOS) terhadap return saham. *Jurnal Ilmu dan Riset Manajemen*, 6(2), 1-19.
- Putu, M., Moeljadi, D., & Djazuli, A. (2014). Factors affecting firms value of Indonesia public manufacturing firms. *International Journal of Business and Management Invention*, 3(2), 35-44.
- Raharja, B. S., Anwar, Q. K., Nugroho, A., & Aligarh, F. (2020). The Moderating Role of Investment Opportunity Set on The Firms' Dividend Decisions. *International Conference of Business, Accounting and Economics, ICBAE 2020*. Purwokerto, Indonesia.
- Rehman, O. U. (2016). Impact of capital structure and dividend policy on firm value. *Journal of Poverty, Investment and Development*, 2016(21), 40-57.
- Resti, A. A., Purwanto, B., & Ermawati, W. J. (2019). Investment opportunity set, dividend policy, company's performance, and firm's value: Some Indonesian firms evidence . *Jurnal Keuangan dan Perbankan*, 23(4): 611–622.
- Safitri, J., Fuady, M., Wahyudi, S., & Utom, M. N. (2020). The Influence Of Dividend Policy, Investment Opportunity And Capital Adequacy To Firm Value: Evidence In Indonesia Banking Companies. *International Journal of Scientific and Technology Research*, 9(2), 764-767.
- Sarwar, M. S. (2013). Effect of Dividend Policy on Share Holder's Wealth: "A Study of Sugar Industry in Pakistan". *Global Journal of Management and Business Research Finance*, 13(7), 46-54.
- Siboni, Z. M., & Pourali, M. R. (2015). The Relationship between Investment Opportunity, Dividend Policy and Firm Value in Companies Listed in TSE: Evidence from IRAN. *European Online Journal of Natural and Social Sciences*, 4(1),1805-3602.
- Smith, C. W., & Watts, R. L. (1992). The investment opportunity set and corporate financing, dividend compensation policies. *Journal of Financial Economics*, 32(3), 263-292.
- Subramaniam, R. K., & Shaiban, M. S. (2011). Investment opportunity set and dividend policy in Malaysia: Some evidence on the role of ethnicity and family control. *2nd International Conference on Economics, Business and Management* (pp. 170-177). Singapore: IACSIT Press.

- Subramaniam, R., Devi, S. S., & Marimuthu, M. (2011). Investment opportunity set and dividend policy in Malaysia. *African Journal of Business Management*, 5(24), 10128-10143.
- Titman , S., Keown, A. J., & Martin, J. D. (2011). *Financial Management Principles and Applications*. New Jersey: Prentice Hall.
- Yustisiana, R. (2017). The Relationship between Dividend Policy and Shareholder's Wealth (A Case Study At Mining Companies in Indonesia). *IOSR Journal of Business and Management (IOSR-JBMB)*, 19(2), 53-57. www.iosrjournals.org.
- Zainuddin, F., Wayudi, S., & Muharam, H. (2021). Ownership Concentration, Investment Opportunity, Operational Efficiency, and Firm Value in Indonesian Banking Industry . *Journal of Management Information and Decision Sciences* , 24(4), 1-10.